

# STRANGE MOLLUSCS IN SYDNEY HARBOUR.

By TOM IREDALE.

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Many years ago, before the huge seaborne traffic that now traverses Sydney Harbour had developed, keen naturalists searched the many coves and inlets, that are now unrecognisable through masses of wharfage. Then Woolloomooloo was a happy hunting ground, its low muddy foreshore presenting a rich field of exploit for the marine zoologist. To-day, amazement would momentarily paralyse one of those old searchers could he revisit the scene of his former triumphs. In other classes the same story may be true, but I deal here only with molluscs, as an interesting phase of molluscan history has been revealed these past few weeks.

Included in our List of New South Wales Mollusca there appears quite a number of species with which present-day collectors are more or less unfamiliar, yet the early records seemed unimpeachable. During the last five years quite a lot of collecting has been done, the beaches being regularly searched and the Bottle and Glass Rocks in the Harbour being often visited. Mr. Melhourne Ward has also dredged quite often on the Sow and Pigs Reef, searching for crustacea, but never neglecting molluscan finds. A wonderful field was opened up in Gunnamatta Bay, Port Hacking, where the same conditions exist to-day as were observed by our predecessors in Sydney Harbour. A survey of that locality provided a great deal of important information as to the habits and occurrence of many species, especially with regard to Tectibranchs.

The present essay will however deal with a feature of the Sydney Harbour fauna hitherto unsuspected. Last month (January) when engaged in the study of the Harbour Pile Pests in connection with the Harbour Trust Authorities, a visit was made, through the thoughtfulness of our co-worker, Mr. Roy Johnston, to the Dredge "Triton," a well known object to every traveller across the Harbour. The Master, Captain Comtesse, had been found to be interested in molluscs, and had been collecting the attractive forms brought up by the dredge while working. A very large number of shells was inspected on the dredge, and to my surprise several tropical species were recognised. The Captain then made available his treasures, with almost bewildering results, as more than twenty species were found to have been previously unrecorded for New South Wales, and as many more were only known from odd specimens collected on the far northern beaches of the State.

The most amazing feature of this discovery is the prominence of a strong tropical element of which previous odd reports had met with some distrust. Thus Hedley, after many years' study of this fauna, wrote: "Tropical forms such as *Bonellia* incessantly attempt to colonise our coast, when the Notonectian floods the port, these gain a footing, but perish when the stream swings off shore. *Strombus luhuanus*, a common and conspicuous shell on coral reefs was once abundant at the Bottle and Glass rocks. Then it disappeared from May, 1865, till April, 1896, when it again made its appearance. A living specimen of the tropical *Bursa mammata* Bolten (= *venustula* Reeve) was found alive in the Harbour by T. Rossiter, but, in the forty years that have since elapsed, it has not once been seen again." (Journ. Proc. Roy. Soc. N.S.W., xlix., p. 27, 1915).

In the Comtesse collection, not only were there many *Strombus luhuanus*, but also other unrecorded species of *Strombus*, and, though *B. mammata* was not included, I anticipate seeing it very soon.

It may be emphasised, in view of Hedley's conclusion, that all the species recognised appear to possess swimming larvae, but probably most are permanent residents.

As Captain Comtesse is most enthusiastic, I confidently expect to record many more novelties from this source, some more species having come to hand since the beginning of this note.

Since the preceding was written a day has been spent on the Dredge "Triton," when a bewildering mass of shells and sand was examined. As a load weighed 1,250 tons and was some thousands of cubic feet in extent, very little was critically tested, four bucketsful being washed and sorted. Sufficient was seen to understand the collection of any species in quantity was a matter of time and patience, many varieties being secured by me in the one day, while shells hitherto regarded as uncommon were seen in hundreds, in abnormal size. However, quite recently Captain Comtesse has dredged up two valves (not a pair) of *Hippopus hippopus* L., and this in connection with the other records leads to the suggestion that we may be here dealing with a relict fauna, a reminder of the times when Sydney Harbour enjoyed a tropical climate, a supposition that has often been confidently put forward from geological studies, but the time required from such data has always referred to an age much previous to the apparent age of the present collection of mollusca.

*VEPRICARDIUM PULCHRICOSTATUM* gen. & sp. nov.

Plate xxxvii., figs. 4-5

One of the largest and most attractive of the shells found on the beach at Caloundra (Austr. Zool., vol. iv., pp. 331-336, 1927) is commonly known as *Cardium multispinosum*. A couple of very fine valves in the Comtesse collection were notable on account of the heavy prickly sculpture, a feature rarely perfect on the Caloundra shore shells. The original reference given by Hedley is to Sowerby, Proc. Zool. Soc. (Lond.), 1840, p. 106; then to Reeve, Conch. Icon., vol. ii., pl. 2, fig. 10, 1844. The species came from the Philippines, and was described as having thirty-three ribs, sharply angled on both sides, with a larger variety having twenty-four to twenty-eight ribs. Our shell is very much larger and has thirty-eight to forty ribs, which are rounded, not angulate.

Shell very large, subcircular, obese, beaks central, almost touching, lunule large, oval, smooth, escutcheon elongate, smooth save growth wrinkles.

Colour pale cream, suffused with rose pink towards the margin.

Sculpture consists of thirty-eight to forty elevated narrow ribs, separated by narrower deep gutters, which are apparently smooth in this juvenile state, but show cross latticing through growth lines in the adult; the ribs are rounded and bear scalloped prickles, the hollows facing the apex, closely set, missing on earliest portion of shell (beach worn shells usually have most missing); on a central rib thirty-two scales remain, another thirty-two scars, which are crescent shaped, can be counted and then the apparently smooth area would easily carry as many more.

Inside white showing the rib sculpture and margins deeply denticulate.

Height: 80 mm.; breadth, 75 mm.

Habitat: New South Wales and South Queensland.

It is necessary to introduce a new generic name for this species, as it is quite unlike the type of *Cardium* (a Palaearctic species, *aculeatum* Linné, has often been wrongly cited) the bizarre *C. costatum* Linné. The present species has been classed with the Palaearctic *aculeata*, but it does not appear to have any real relationship with it.

*NOTOCALLISTA LAEVIGATA* Sowerby.

An excellent figure portrays a shell common at Caloundra, South Queensland, and which is also found in Sydney Harbour, and present in the Comtesse collection. This figure (Thes. Conch., vol. ii., p. 738, pl. clx., figs. 156-158) was included by Hedley in the synonymy of *Marcia nitida*, and when I wrote about these things (Proc. Linn. Soc. N.S.W., vol. xlix., p. 210, 1924) I allowed it but without con-

fidence. I suggested Sydney as Strange collected it, but now indicate Moreton Bay, whence Strange sent many shells and where it is very common. The name must be eliminated from synonymy, and added to our List as the correct name for the northern species confused with the southern *disrupta*, which differs in shape and size and occurred at Twofold Bay, as recorded.

*PROXICHIONE MATERNA* gen. & sp. nov.

Plate xxxvii., figs. 2-3.

The magnificent shell called by some the Mother Cockle (Austr. Mus. Mag., vol. ii., p. 287, fig. in text, 1925) differs from the West Australian shell which was called *Venus laqueata* by Sowerby (Thes. Conch., vol. ii., p. 706, pl. eliii., fig. 15) in shape and sculpture.

Shell very large, inequilateral, crass, lunule distinct, anterior margin short, posterior prolonged rather truncate, lower margin of medium convexity. Colour dirty brownish cream when alive, paler when dead. The sculpture consists of well developed lamellae, closely set, recurved and finely crenulated on edge, crenulations becoming strong frills at each side. The early whorls show fine linear longitudinal striation, but this disappears as the shell grows, only the wrinkling on the lamellae indicating its former presence, and a weak concentric striation taking its place. On a large shell seventy well marked lamellae can be counted, the many smaller ones near the umbones not being taken into the count. The lunule is narrowly heart shape and longitudinally closely wrinkled, as is the distinct elongate escutcheon: the margins of the whole shell are very finely denticulate. Internally the shell is white, the muscle scars large and distinct, the pallial sinus short and subangulately rounded. The hinge teeth are very strong, the middle left markedly bifid, with a conical left anterior lateral; not grooved.

Height: 85 mm.; length, 113 mm.

Habitat: Sydney Harbour, living in mud from below low water to five fathoms.

This species does not agree well with any of the named groups and is perhaps restricted to southern Australia, and moreover this Cockle appears to be the largest of its kind in Australia.

*PARATAPES POLITA* Sowerby.

This name must replace *Paphia semirugata* of Hedley's List. The species was admitted through a note by Smith (Zool. Res. Challenger, vol. xiii., p. 115, 1885) who wrote: "*Tapes polita* of Sowerby (Thes. Conch., vol. ii., p. 682, pl. cxlv., figs. 15-16, 1852) is merely the younger state . . . his specimen is said to have been dredged near Sydney, at a depth of 6 fathoms, on a mud bottom."

The species appears in the Comtesse collection, but otherwise it was not in this Museum from New South Wales. Queensland specimens differed in shape and colouring, and apparently sculpture, and are nearer the true *semirugata* Philippi (Zeitsch. für Malak., 1847, p. 88; Abbild. Beschr., vol. iii., pp. 24-76, pl. 7, fig. 4, 1848), but as that was from unknown locality that identity is not even certain. *Paratapes* was proposed by Stolickza (Cret. Pal. India, p. 144, 1871) to replace *Textrix* Römer, preoccupied, the type being *Venus textile* Gmelin.

*TALOPIA MORTI* sp. nov.

Plate xxxvii., fig. 9.

Included in the New South Wales List there is a rare shell known as *Monilea lentiginosa* A. Adams, which was described (Proc. Zool. Soc. (Lond.), 1851, p. 188, 1853) from the Island of Panay, Philippines. As Trochoids generally have limited distribution this record was viewed with suspicion, and when the opportunity was offered me of collecting a series on the beach at the Daintree River, North Queensland, it was greedily grasped. My reward came when I found in the

Comtesse collection many specimens of the New South Wales shell which obviously differed at the first glance and is here described.

Shell elevated trochoid, whorls slightly shouldered; mouth a little oblique, subcircular, umbilicate.

Colour pale creamy buff, obscurely flamed longitudinally with brown. Sculpture consists of spiral lirae with faint longitudinal striae; the apical whorls minute, smooth, the succeeding whorls (six in number) bearing spiral lirae which are developed in pairs, set very close together, a narrow interval intervening before the next pair; the subsutural pair being less pronounced, about four on the earlier whorls, six pairs on last whorl, where longitudinal threads may be seen; the longitudinal sculpture begins as strong slanting threads which decrease in importance as the concentric lirae strengthen, but persist as a subrenulation even to the last whorl where the threads may be still seen on the base.

Columella curved, anteriorly truncate and medially developing a nodular projection into the umbilicus from which a rib proceeds internally; a slight glaze connecting the posterior end of the columella and the outer lip.

Umbilicus of medium width, perspective, lower edge lirate, internally smooth.

Aperture subcircular, outer lip sharp, strongly grooved, internally, agreeing with the external sculpture.

Height: 24 mm.; breadth, 24 mm.

Habitat: New South Wales and South Queensland.

This species is named in honour of Mr. H. S. Mort, an enthusiastic Sydney conchologist.

It will be as well here to describe the North Queensland species.

*TALOPIA DIVIDUA* *sp. nov.*

Plate xxxvii., fig. 10.

Shell smaller than the preceding, more depressed, sutures less marked, whorls more flattened, with less shouldering.

Colour similar, but flames less notable, general hue darker.

Sculpture of like nature, but stronger longitudinal threads traverse the spirals and cut them into ill-defined nodules; the twin lirae are not so well developed and would not be noticed on the base without special search; the general appearance of the shell suggests obscure nodulation, whereas in the southern species the lirae strongly predominate; the columella is a little shorter and more curved; the umbilicus narrower.

Height: 14 mm.; breadth, 17 mm.

Habitat: North Queensland; type from Daintree River mouth beach.

FAMILY NATICIDAE.

The members of this family are very interesting molluscs and apparently there are many more species than have yet been commonly accepted. With regard to the tropical fauna, I will have some interesting facts to record and these introduce the matter of *Natica filosa* Reeve, which appeared in Hedley's List as *Polinices filusus*. One of the last pieces of conchological research published by Hedley was concerning the Queensland forms, with horny operculum previously classed with *mammilla* L. Using the genus *Uber*, Hedley showed that *mammilla* L. must be restricted to the West Indian form; he then indicated three sections for which names were available as *Mammilla* Schumacher (Essai, nouv. Syst. vers. test, pp. 58-190, 1817) for *M. fasciata* = *Uber mammatum* Bolten. Regarding Reeve's *filosa* as identical, this name would replace that on the N.S.W. List. Specimens in the Comtesse collection show the Sydney shell to differ from the North Queensland shell, which agrees better with the Boltenian species, and to come between

*siniae* Deshayes and *simioides* Recluz (from Fiji), and may be called *propesimiae* nov. (plate xxxviii., fig. 5).

BARTSPIRA (ALOCOSPIRA) DYSPETES *sp. nov.*

Plate xxxviii., fig. 12.

Dealing with Twofold Bay shells, I added *A. marginata* var. *tasmanica* Ten-Woods to this fauna, but since then Master Consett Davis brought me in shells from Anstinner and Bulli, on the South Coast, which were of this association, but differed appreciably.

Angas recorded *A. marginata* from Sydney sixty years ago, and this record was rejected by Hedley, but in the Comtesse collection appeared a shell which might easily be mistaken for the southern species, but is here described.

Shell medium, mouth open, a little obese, spire very short, attenuate.

Colour white, post sutural band yellow, as is an anterior canal.

Apical whorls two rounded, adult whorls five, nearly smooth, a medial indistinct spiral lira only present, half a dozen grooves on the base.

Inner lip spread as a glaze, extending up and past the aperture to the previous whorl.

Length: 22 m.; breadth, 12 mm.

Habitat: New South Wales (Sydney Harbour, type). Anstinner, Bulli.

CANCELLARIA UNDULATA *Sowerby.*

A few years ago I wrote: "Sowerby's name was given to a Tasmanian shell, but the Sydney form does not appear to differ much from the specimeus so far studied." This is a good instance of the value of extensive material, as a little later I was able to collect large series, and upon handling them in numbers the Sydney shell was seen to be larger, comparatively narrower and with fewer broader longitudinal ribs. These are apt to disappear on the last whorl, eleven indistinct ones against the same number well-defined ones on the antepenultimate.

In order to provide a new generic name, *Sydaphera*, for this group, the Sydney shell is taken as type and named *Sydaphera renovata* *sp. nov.*, the figure being taken from one of Comtesse's shells, not by any means the largest, though measuring 37 mm. x 20 mm. Plate xxxviii., fig. 3.

PERIRHOE MELAMANS *sp. nov.*

Plate xxxviii., fig. 7.

A magnificent Terebrid of tropical aspect caught the eye, and in the Australian Museum was found a similar shell labelled "Port Stephens," but the record had not been accepted as the species appeared alien. Bartsch unfortunately published A Key to the Family Terebridae (Nautilus, vol. xxvii., pp. 60-64, 1923) which must be referred to, but it is an unenviable task. He there introduced *Terebrina*, new subgenus, with type *Terebra cingulifera* Lamarek, for species having the spiral lines punctate, *Perirhoe* having the spiral lines not punctate. *Terebrina* had been introduced into conchological literature more than one hundred years before by Rafinesque (Anal. Nat., p. 145, 1815; Cf. Iredale, Proc. Mal. Soc., vol. ix., p. 262, 1911), so I propose a new subgeneric name for the present species, *Dimidacus*.

Shell narrowly elongate, creamy fawn.

Nuclear whorls missing. Adult whorls remaining twenty in number.

Whorls flattened, encircled by four linear grooves, which are punctate; the first groove cuts off a broad subsutural collar, the second marks off a less space, the succeeding two still less, being closer together. A longitudinal striation cuts earlier whorls a semi-nodulose design, the collar showing it most, but even this soon loses strength, and the later whorls only show very obscure indications, while even the punctuation in the grooves becomes less distinct. The last whorl shows

a broad rounded peripheral band, succeeded by nine or ten closely set punctate grooves.

Outer lip thin, sharp, basally rounded, forming with the anterior twist of the columella a short slightly recurved open canal. Columella with a scarcely noticeable anterior fold, the inner lip showing as a slight glaze continued on the body whorl to the posterior edge of the outer lip.

Length: 75 mm.; breadth, 14 mm.

Habitat: New South Wales (type, Sydney Harbour), Port Stephens.

*COLUS SINOVELLUS* sp. nov.

Plate xxxviii., fig. 15.

The Comtesse collection included a species of *Colus* which was obviously not the southern *C. novae-hollandiae* in any form, but was of tropical aspect. It did not agree with the species known as *turrispictus* Martyn, which was included in Hedley's Check List, nor with specimens so determined from northern New South Wales.

Shell small, regularly fusiform, whorls with slight sloping shoulder, apex missing, seven adult whorls remain, canal long, open, and nearly straight, slightly sinuate.

Colour pale brownish white, marked longitudinally with darker brown markings.

Sculpture consists of spiral lirae, over-ridden by longitudinal ribs, which are more pronounced on the earlier whorls, and fade away on the last whorl. On the antepenultimate whorl about thirteen ribs may be counted, and on the preceding whorl the same number crossing about twelve cords, which are weak on the shoulder below the suture and strongest on the periphery.

Inner lip curved, with a mere callus, outer lip thick, but not varicose.

Canal very long, narrow, sinuate, nearly straight.

Length: 85 mm.; breadth, 31 mm.

Habitat: New South Wales (Sydney Harbour).

*COLUS CONSETTI* sp. nov.

Plate xxxviii., fig. 19.

A small *Colus*, quite unlike the southern *novae-hollandiae*, and strongly recalling the West Australian *philippi*.

Shell small for the genus, whorls shouldered, apex missing, canal bent, long and open, rather solid, but translucent, with a short brown periostracum.

Colour: white spotted with brown.

Adult whorls seven, first corded with seven ridges, anterior three smaller, median two a little stronger, succeeding two not quite so strong; with age the median two become more pronounced, the preceding three on the shoulder less marked, and the succeeding two, sometimes with an intervening third, nearly as strong as the peripheral pair. As the periostracum wears off these are seen to be boldly marked with brown red spots, and sometimes lines of spots are observed. On the last whorl below the shoulder half a dozen strong cords can be counted, more than a dozen more succeeding along the canal and inner lip.

Canal long, open, longer than in the specimen figured, which has the canal broken.

Columella smooth, but sculpture shows through fine glaze of inner lip.

Length: 62 mm.; breadth, 28 mm.

Habitat: New South Wales. All specimens collected by Master Consett Davis, after whom the species is named.

## FAMILY MITRIDAE.

The members of this family are in such systematic confusion that recognition of more novelties for New South Wales is not exactly welcomed. It necessitates the criticism of many species scattered without any recent attempt at order, and therefore the classification here used may require alteration in the near future. *Mitra* has been restricted to the forms about *tessellata* Martyn, the genus dating back to that origin. Therefore I introduce

CHRYSAME LEMMA *sp. nov.*

Plate xxxviii., fig. 6.

Shell small for the family, obtusely fusoid, aperture about equal to spire, canal short and broad.

Colour cream blotched with red brown.

Apical whorls missing, nine adult whorls remain.

Sculpture consists of narrow flattened encircling cords with broad interspaces, sometimes twice as broad as cords; sutures appressed; on the last whorl fifteen cords can be counted; on the antepenultimate five, on the two preceding four each, the earlier two three each; a microscopic longitudinal striation is clearly seen between the cords on the earlier whorls, but becomes obsolete on the later ones.

Columella five-plaited, the anterior one very small.

Outer lip strongly roundly erenately thickened; aperture narrow, canal short and broad.

Length: 32 mm.; breadth, 14 mm.

Habitat: Sydney Harbour, New South Wales.

Apparently related to *Mitra crassa* Swainson, and *M. ferruginea* Lamarek, but not specifically identical, being shorter and narrower and differently coloured from the first, more like the latter. This may be classed in the genus *Chrysame* as above mentioned, but when Dall showed Martyn's usage to be the earliest recognisable, he proposed *Papalaria* (Bull. U.S. Nat. Mus., No. 90, p. 60, 1915) for "the red-spotted Mitras"; he overlooked Rafinesque's *Mitraria* for *Mitra* Lam., which was the same thing, while Melvill, with the custom of his time, used *Eumitra* as a subgeneric name for the typical Mitres of his recognition, i.e., the "*mitra*" group. Under a recent nomenclatural ruling of the International Commission a lot of confusion can be caused by reviving curious interpretations of generic usage, as in the present case.

VICIMITRA PROSPHORA *gen. & sp. nov.*

Plate xxxviii., fig. 17.

Roy Bell dredged a number of Mitres which interested me and I could not easily determine them, but found they had been determined as *Mitra solida* Reeve. As mentioned above, this is a difficult group, and I allowed them to pass as that. Again meeting with the species in the Comtesse collection, I re-investigated the matter, and found that, although there was a superficial resemblance, the Sydney shell differed in sculpture, and as Reeve's species was from unknown locality I describe the Sydney species as above. The genus name is necessary, as the species does not agree with any of the ordinary named groups, and Cooke has shown from a study of the radulae the discordant elements classed as "*Mitra*." Peile (Proc. Mal. Soc. (Lond.), vol. xv., p. 93, fig. 1, in text, 1922) has figured the radula of the species here described under the name *M. solida* Reeve.

## FAMILY STROMBIDAE.

As heretofore noted the occurrence of *Strombus luhuanus* in Sydney Harbour has been cited as a classical instance of the migration of tropical species to our locality. Years ago when *S. luhuanus* was first collected here, another species, *S. floridus*, was found living alongside. When *S. luhuanus* was rediscovered the

second species was still missing. The late G. McAndrew, however, sent both species from Shellharbour, many miles south of this place.

In the Comtesse collection were quite a few examples of *S. luhuanus*, but with them half a dozen of an entirely different species and an odd one of still a third, *floridus* not being yet observed.

I have prepared a Review of the Australian Strombs in which essay complete details will be given concerning the history and classification of all the Australian species.

Here may be recorded the names to be used for the New South Wales species: thus *Conomurex* Fisher must be the generic name for the *luhuanus* group, and *Canarium* Schumacher for the *floridus* form. This appears in Hedley's List as *urceus* Linné, but is the species referred to as *floridus* Lamarek and which should bear the earlier name of *flammeum* Link.

The species Hedley determined as *ustulatus* Schumacher is the true *urceus* Linné, and the odd specimen is referable to this species. There are several forms or species ranging about *urceus* Linné, so that if series can be collected the name may need emendation.

The half dozen shells agree very well with *Strombus dilatatus* Swainson (Zool. Illus., 1st ser., vol. ii., pl. 71, October, 1821) (no locality) whose name was changed, on account of a prior (?) *S. dilatatus* Lamarek, by Reeve to *S. swainsoni*. Lamarek's name was, however, later in date (Hist. Anim. s. Vert., vol. vi., pt. 2, August, 1822). Kobelt recorded this species from New Caledonia, and Shirley introduced it to the Queensland fauna. Shirley's records are worthless, but the species really occurs there, as Mr. Melbourne Ward collected it on the beach at Friday Island, Torres Straits. It belongs to the *succinctus-epidromis* series for which Oostingh (Medel. Landb. Wagen. (Ned.) Deel., 29, 1, p. 58, 1925) has provided the genus name *Labiostrombus*, *succinctus* being designated as type.

#### DISTORSIO RETICULATA Bolten.

Plate xxxviii., fig. 2.

The first astonishing shell I noted was the species known as "*Distorsio cancellinus*," but the correct name of which appears to be *Distorsio reticulata* Bolten (Mus. Bolten, pt. ii., p. 133, 1798, based on Martini, 2, t. 41, fig. 405, 406, from I. Hitoë, one of the Moluccas). Three specimens in various stages of growth were in the Comtesse collection, and a genus as well as a species is added to the New South Wales List. Perry (Conchology, pl. x., 1811) proposed a new genus *Distorta* with two species *D. acuta* and *D. rotundata*, the latter being the well known *D. anus*, the former given as "a native of New South Wales." Unfortunately it is not the present species, but is the American shell named *Triton clathratum* Lamarek (Expl. Liste, p. 4, 1816, for Ency. Meth., pl. 413, fig. 4a-b) which name it anticipates. Moreover, Bolten had proposed *Distorsio clatrata* (sic) for an undescribed variety of *Murex anus* Gmel., and this would invalidate Lamarek's name.

#### FAMILY SCALIDAE.

In Hedley's Check List *Scalaria perplexa* Pease (Amer. Journ. Coneb., vol. iii., pt. iv., p. 268, April 2, 1868) was included, apparently on the figure given by Lankavel and Martens. Pease, however, described the species from Hawaii, with 9-10 varices, aperture abbreviately oval; dark brown at the sutures, rarely the whole space between the varices coloured dark purplish brown and dimensions given as 32 x 13 mm. The New South Wales shell, so named, differs in proportions, being 36 mm. x 11 mm., has never any colour and has twelve or thirteen varices and may be named *Scala perplicata* sp. nov. In the Comtesse collection were some beautiful shells which agreed with other in the Australian Museum collection determined as *S. alata* Sowerby (Thes. Conch., vol. i., p. 84, pl. xxxii., figs. 10-11, 1844, Luzon), but which differed in form and sculpture, being much

more unrolled and having ten varices instead of eight. I here name the Sydney shell figured (pl. xxxviii., fig. 14) *Scala parspeciosa* sp. nov.; the type measures 21 mm. by 14 mm. broad.

CYMATIUM PYRUM Linné.

One of Hedley's last molluscan notes was the addition of this species (Proc. Linn. Soc. N.S.W., xlviii., 1923, p. 311) to the Australian fauna. Captain Comtesse has now brought in a specimen which agrees best with this species, though it shows a little variation. With it were specimens of the species included by Hedley as *C. exaratum* Reeve (Conch. Icon., ii., pl. 13, fig. 50, 1844) which was described from Port Essington; while some shells agreed fairly with Reeve's figure: others varied appreciably and may be the basis of the record of Reeve's *gemmata*: such may be called *zimara* (Plate xxxviii., fig. 11). Another interesting addition is the species known as *C. chlorostomum* Lamarck (Hist. Anim. s. Vert., vol. vii., p. 185, 1822) described from "l'Océan des Antilles." It does not much matter whether this species came from the West Indies or not, as there is an earlier name *Tritonium nicobaricum* Bolten (Mus. Bolten, pt. ii., p. 126, 1798) based on Martini, 4, t. 132, figs. 1246-1247 (Nicobar Is.) which is apparently the shell under notice, though here again a little variation from the tropical form can be seen.

FAMILY TONNIDÆ.

In Hedley's Check List, 1918, p. M.68, there appeared *Tonna perdix* and *T. variegata*. Later, Hedley reviewed the family, and, rejecting the former from the New South Wales fauna, determined the latter as a new species *T. cerevisina* and added another new species *T. tetracotula*, and another named species *T. cumingii* (Rec. Austr. Mus., xii., p. 329, et seq., 1919). A trawler brought in a specimen of the *perdix* type from off Botany, and as the specimen was in poor dead condition I was included to disallow it, but in view of the Comtesse collection it must be reinstated. Among Comtesse's shells, not only were *T. cerevisina* and *T. cumingii* not rare as small specimens, but there was a dwarf of *T. tetracotula*, an absolutely unexpected species, and still more extraordinary, a stunted "*Dolium pomum*." This is quite a delightful addition and allows rectification of the genus name to be used. For some years *Malea* was used as the species (*pomum*), obviously was generically separable from either the type of *Tonna*, *galea* Linné, or of *Cadus* Bolten, *perdix*, and I had anticipated using *Cadium* Link., but, in order to preserve *Malea* for his American shells, Woodring (Carnegie Publ., 385, p. 311, 1928) has designated *perdix* as the type of *Cadium* also. *Malea*, however, is not applicable to *pomum*, as its type species (*latilabris*) is just as definitely not congeneric, as either of the "*Tonnas*" with unarmed mouth. It becomes, therefore, necessary to introduce a new generic name *Quimalea*, naming *pomum* Linné as type.

The case of the Linnean species *Buccinum perdix* requires consideration, as forms are found in the West Indies, as well as in the Pacific Ocean, and these are certainly distinguishable. The Linnean species name should be restricted to the former, and Blainville's name *rufum* used for our species, which is not uncommon in the Capricorn Group, so that the additions would read: *Cadus rufus* Blainville, and *Quimalea pomum* Linné. The specific references would read:—

*Dolium rufum* Blainville, Dict. Sci. Nat. (Levrault), vol. 54, p. 503, 1829; type locality "Australasie" = Queensland.

*Buccinum pomum* Linné, Syst. Nat., xth. ed., p. 735, 1758; type locality, here selected, Amboina, from Rumph. Mus., t. 27, fig. B.

Shell of medium size for the family, regularly fusoid, aperture and spire about equal, rarely the spire a little longer, sutures impressed.

Colour of dead shell, pale creamy buff with a few white spots below the sutures.

Apical whorls missing, nine adult whorls present, the earlier ones sculptured with three or four flattened, faintly crenulated, lirae with narrow interstices; the crenulations vanish first, the lirae becoming less marked and the interstices apparently finely punctate; on the whorl preceding the penultimate only five faint lines appear and on the next these are scarcely recognisable, a couple near the shoulder being most prominent; the last whorl still shows this pair, but the rest of the body whorl is practically smooth, half a dozen faint lines reappearing on the base.

Columella four plaited, plaits strong; inner lip reflected as a heavy glaze, which crosses the body whorl to the outer posterior angle of the lip. Outer lip thickened, sharp, smooth inside. Canal short, broad, open.

Length: 46 mm.; breadth, 17 mm.

Habitat: New South Wales (Sydney Harbour, type).

Reeve's species is much larger and the cancellation of the upper part of the whorls near the sutures is missing in our species; the youngest shells show a slight longitudinal striation, but none of the older ones; Reeve wrote: "Columella five-plaited"; in the present species four plaits can only be counted; only a faint indication of a fifth in immature shells; otherwise the coloration and form of Reeve's *solida* recall this species, but Melvill has recorded *M. solida* Reeve from the Persian Gulf.

*MITROPIFEX QUASILLUS gen. & sp. nov.*

Plate xxxviii., fig. 18.

Shell elongately fusiform, spire twice as long as aperture, canal long and narrow, whorls flattened, sutures impressed.

Colour (dead shell) reddish fawn, a white band encircling the periphery (living shell reddish brown).

Apical whorls missing, eleven adult whorls remaining, sculptured with narrow sinuous longitudinal ribs, the interstices a little wider than the ribs; the inter-spaces are spirally lirae, these lirae showing spaces a little narrower between. There are twenty ribs on the last whorl, the encircling lirae being about twenty, while on the antepenultimate whorl just the half dozen, seen above the periphery of the last whorl, can be counted, the longitudinal ribs being reduced to twenty and so on up the spire.

Aperture small, narrow, canal lengthened, narrow, outer lip thin and sharp.

Columella with three strong plaits, a fourth anterior one scarcely visible.

Inner lip reflected as a thickish glaze, continued across to the corner of the outer lip.

Length: 31 mm.; breadth, 11 mm.

Habitat: Sydney Harbour, New South Wales.

Another tropical shell, which was not quickly recognised, but a specimen collected by Mr. Melbourne Ward in the Albany Passage was found to agree in general, but was not so broad basally, nor so attenuate and with fewer ribs and concentric lirae; it was living or very recently dead, and was richer in coloration.

The varied names provided for "Mitres" must be considerably increased before the natural groups can be easily recognised so another name is here added. It is one of the many series grouped under *Verillum*, and more strictly, *Costellaria*, whose radula indicates that two families are confused in the common acceptance of "*Mitra*," and consequently much splitting must be done.

FAMILY LATIRIDAE.

A heterogeneous assemblage of species has been referred to *Latirus* and *Peristernia*, and fortunately none has hitherto been recorded from New South Wales. Angas named *Peristernia brazieri*, but Hedley pointed out that the columella did not bear plaits, the essential feature of the "Latiroid" alliance; he pro-

posed *Nodopelagia* for that species, transferring it to the family *Buccinidae*. Hedley further designated *nassutula* as type of *Peristernia*, but years before Cossman had selected *crenulata*, a selection perfectly valid.

Melville has written about these things, another unfortunate occurrence, as lumping very unlike shells together, he apologised by stating it was as natural a genus as "*Mitra*," a name which was known to cover species probably belonging to different families. In order to assist in the re-ordering of the species, I introduce

*CLIVIPOLIA IMPERITA* gen. & sp. nov.

Plate xxxviii., fig. 10.

Shell small, regularly fusiform, spire about equal to length of aperture, canal a little lengthened, narrow, a little recurved.

Colour pale brownish cream, mouth white.

Apical whorls missing, eight adult whorls remaining sculptured with revolving cords over-ridden by longitudinal rounded ribs; on the body whorl a dozen major cords with half a dozen minor ones may be counted with about ten ribs with deep interstices, while a microscopic striation can be seen under a lens; the antepenultimate whorl shows half a dozen cords, preceding ones four, three, the longitudinal ribs decreasing in the same manner; sutures well marked, not channelled.

Aperture a little pearshaped, canal narrow, open, a little recurved and lengthened; columella short, two-plaited, plaits rather weak; inner lip slight, passing as a glaze to the outer lip. The latter is thickened, a little incurved, not varicose, but bearing internally four strong nodules.

Length: 29 mm.; breadth, 13 mm.

Habitat: Sydney Harbour, New South Wales.

This species has a tropical facies, but does not correlate with any of the North Queensland species yet seen, but will probably turn up there later.

*NASSARIUS GEMMULATUS* Lamarek.

The name *Buccinum gemmulatum* Lamarek, the basis of the above name in Hedley's List is preoccupied by Wood (Index Test, p. 115, 1818), but Lamarek previously had given in the Explanatory List, p. 2, 1816, the name *Nassa clathrata* to the species figured in the Ency. Meth., p. 394, fig. 5a-b., the same figure afterwards named as above.

Shells in the Comtesse collection are very large and more closely ribbed than North Queensland shells, while Lifu shells so determined are smaller and abundantly distinct. Tryon included as synonym *N. conoidalis* Deshayes, which Hedley revived for the species known as *cremata* Hinds. I would regard Deshayes figure as nearer the conventional *gemmulatus* than the finely ribbed differently shaped *cremata*, and I therefore describe the New South Wales shell as a new species in order to obviate any further confusion, and have great pleasure in dedicating it to Captain Comtesse as

*NIOTHA COMTESSEI* sp. nov.

Plate xxxviii., fig. 13.

Shell large for the genus, spire elevated, body whorl swollen, mouth small.

Colour shining creamy white.

Apex missing, seven adult whorls with beautiful gemmulate sculpture, sutures flattened canaliculate. Last whorl with ten distinct spiral rows cut into gemmules by twenty-five longitudinals before the growth lines, which are packed six deep behind the aperture, are reached. The antepenultimate whorl shows five spirals, the preceding three whorls four each, similarly sculptured, the number of longitudinals being reduced as the apex is reached.

Columella short, nearly straight, wrinkled; inner lip recurved, forming a steep wall of glaze and extending across to the outer lip, the gemmulate sculpture showing through the glaze.

Outer lip strongly crenulate throughout, thickened, but not varicose.

Aperture small, ovate; outer lip strongly lirate within, ten lirae being counted running well inside; a long tooth also on the inside of body whorl; canal very short, a little recurved, bounded by a deep narrow fasciole.

Length: 37 mm.; breadth, 24 mm.

Habitat: New South Wales (type, Sydney Harbour); South Queensland.

The North Queensland shell is smaller, with fewer longitudinals.

#### RAPANA NODOSA A. Adams.

Plate xxxviii., fig. 9.

Hedley has included a little shell in the N.S.W. List, having given a figure of it in the Proc. Linn. Soc. N.S.W., xxxviii., p. 331, pl. xix., fig. 80, 1913, suggesting the Philippine locality is wrong, and that the types originally came from Port Jackson. While tentatively accepting this conclusion, the generic location must be amended, and the present species would be better placed near Hedley's *Corallophila lischkeana*.

#### COLSTYRNOLA SERICEA gen. & sp. nov.

Plate xxxviii., fig. 16.

From Japan, Arthur Adams (Thes. Conch. ii., 810, pl. clxxi., fig. 35, 1854) described *Obeliscus brunneus*, figuring an elongate brown shell with flattened whorls, but describing it as having "rather convex whorls with sutures crenulated," from Japan.

To meet with a similar shell in Sydney Harbour was a novelty, and Mr. Melbourne Ward dredged similar shells in the Albany Passage, at Cape York. The Sydney shell, here figured, is larger than the North Queensland one, the whorls noticeably deeper, otherwise they agree in detail.

Shell elongate, awl shaped, imperforate, whorls flattened.

Colour glossy orange brown; living shell (from North Australia) deep red brown.

Whorls, apex missing, sixteen in number, flattened, suture deeply impressed.

Sculpture consists of microscopic concentric striae only discernible with a lens, superficially apparently smooth and glossy; the upper edge of each whorl is slightly flattened and closely crenulate, lower edge of preceding whorl smooth, a slight peripheral keel forming the deep suture. Last whorl semi-keeled at the periphery, base rounded.

Columella straight, effuse and truncate anteriorly, posteriorly bearing a single strong twist; inner lip extending as a broad thin glaze over the body whorl. Outer lip, thin, sharp, not plicate within.

Length: 26 mm.; breadth, 7.5 mm.

Habitat: New South Wales (Sydney Harbour, type). North Queensland.

The North Queensland shell has the apex perfect, and this consists of a helicoid, one and a half whorls, inverted anastrophe.

#### ATYS NAUCUM Linné.

To my surprise in the Comtesse collection appeared a shell I had collected at Low Island, North Queensland, only a few weeks earlier. This adds a genus as well as species to the N.S.W. List.

*Atys* was introduced by Montfort (Conch. Syst., vol. ii., p. 343, 1810) with type *A. cymbulus* = *Bulla naucum* L. A few years later, Schumacher (Essai. nouv. Syst. vers. test., 1817, pp. 79, 259) proposed *Naucum* for the same species.

In recent years the genus name has been used as a refuge for very unlike

shells as *Bulla cylindrica* Helbling, a common Queensland shell which is the type of *Aliculastrum* Pilsbry (Man. Conch., xvi., 237, 1896; new name for *Alicula* Ehrenberg, 1831, not Eichwald, 1830) and "*Atys*" *dentifera* A. Adams, 1850, a shell that led me a long way astray, it is so different, and one that has a genus name *Dinia* H. & A. Adams (Gen. Rec. Moll., ii., p. 21, 1854) available; the little shell Brazier named *Atys dubiosa*, and which Hedley transferred to *Cylichna*, I now take as type of a new genus *Osorattis*.

*QUIBULLA* gen. nov.

This genus name is here introduced with *Bulla botanica* Hedley, as here figured, as type. It is obvious that a group name is necessary, and, owing to the confusion about the genus name *Bulla*, it is necessary to introduce some alternative at once. *Bulla* was introduced for a large series of molluscs by Linné, after he had utilised the same name for a subgenus of insects. The usage of the genus name for the mollusc continued until very recently, when it was discarded for *Bullaria* Rafinesque. Unfortunately this action has been questioned and the revival of *Bulla* demanded, a most unfortunate suggestion as this has necessitated the re-opening of the matter with annoying results. Of the long series allotted by Linné to *Bulla*, the first was *orum*, and the sixth *Bulla naucum*, the first synonym being "*Bulla Rumph*"; by Linnean tautonymy this species automatically becomes the type of *Bulla* Linné, 1758. The conventional type of *Bulla* is not that species, but *ampulla*, which does not figure until later on in Linné's list, and pretty obviously was not considered by Linné as his "type" species. Furthermore, many later workers did not so regard it, but, as Lamarek used it as an example, it gained some acceptance. A substitute for *Bulla* Linné follows its tautonymic type, and consequently *Bullaria* Rafinesque cannot be used for the *ampulla* series. *Bullus* Montfort is simply a mis-spelling and cannot be seriously considered as a substitute. I write this advisedly as the acceptance of mis-spellings would paralyse all progress in conchology, as these are very abundant owing to such writers as J. E. Gray and Swainson, who were notoriously careless in proof-reading. *Vesica* was introduced by Swainson in 1840 for *ampulla* and *naucum*, but it need not inconvenience us as it is preoccupied by Humphrey (Mus. Calonn., 1797, p. 21).

Gray's species *Bulla australis* was simply localised as from Australia, and, as Hedley's *botanica* was only proposed as a new name, I here designate as type locality, Sydney Harbour, where the species is very common. As no type of Gray's species is in existence, I figure a new type (Plate xxxviii., fig. 4).

A feature which requires notice is the presence of incised spiral lines about the base; this is present in most specimens, and has hitherto been regarded as a distinctive character of the Neozelanic *quoyii*. The *ampulla*-like form is here described as

*QUIBULLA SELINA* sp. nov.

Plate xxxviii., fig. 1.

Shell large, rounded oval, comparatively narrower than traditional "*ampulla*," but otherwise recalling it.

Colour brown, red, pink and grey, confusedly forming a mottled pattern, with no outstanding feature.

Sculpture consists of fine growth lines, no spiral striae being observed even near the base; the apical perforation very small and deep, and bearing an internal furrow, but no striae.

Aperture rounded anteriorly and rapidly narrowing towards the apex; outer lip running rather backwards and then rapidly curving inwards to meet the last whorl above the apex.

Columella thick, slightly curved and reflected as a heavy white callus.

Inner lip deposited as thick white glaze extending to the apex.

Height: 60 mm.; breadth, 37 mm.

Habitat: Sydney Harbour, New South Wales.

Much larger specimens have been seen in a broken condition.

With these were found quantities of the small "*Bulla*" Hedley included in the New South Wales List as *punctulata* A. Adams. Pilsbry recorded this species from Panama, etc., and then stated that Australian specimens showed no variation. However, he described the "interior of the umbilicus sculptured with deep spiral grooves, about a dozen in number," which is in disagreement with our species. Pilsbry determined as a distinct species "*A. (sic) angasi*" and figured it. Hedley regarded this as synonymic with *punctulata*, but it is quite distinct, and is here figured. A "punctulate" species also occurs in Sydney Harbour and will be dealt with later, while there is also a "punctulate" shell in North Queensland which does not harmonise with Pilsbry's description of the Mid-West American species.

*BULLINULA MELIOR* *sp. nov.*

Plate xxxvii., fig. 7.

A common little, but attractive, shell, is listed by Hedley under the name *Bullinula ziczac* Muhlfieldt, but as Muhlfieldt's (recte Megerle's) name is invalid recourse must be had to *Bulla lineata* Gray (Ann. Philos. (Thomson), vol. xxv., p. 408, June, 1825) described from New Holland and figured (back view) in Wood. Suppl. Index Test (p. 9, pl. 3, *Bulla*, fig. 1, 1828).

Associated with this species is another which is here described under the above name, *melior*; it is broader, with a more depressed spire and stronger sculpture, apical whorls apparently white.

Shell broadly ovate, spire depressed, thin, columella truncate.

Colour bluish white, with two encircling bands of deep lake, one broad, one about the suture, the other nearly as broad, about the middle of the whorl; a few thick longitudinal streaks of the same colour also appear.

Apex white, anastrophic, tilted, nearly immersed; first adult whorl wound in nearly the same plane, and almost hidden by the succeeding one, the suture being deep and subcanaliculate; next two whorls increasing rapidly and descending.

Sculpture consists of flat-topped lirae, with interstices about half the width of the lirae; the interstices filled with oblong punctures.

Columella nearly straight, abruptly truncate, anteriorly, reflected, leaving a very narrow umbilical chink; internally bearing a strong fold medially, and posteriorly appressed to the body whorl with a thin glaze.

Height: 17 mm.; width, 12 mm.

Habitat: Sydney Harbour, New South Wales, dredged in 4 fathoms.

While the common *B. lineata* Gray (Plate xxxvii., fig. 7) occurs commonly on all the beaches as dead shells and can be met with living in rock pools on the littoral, the present species has only been dredged.

The variation seen in *B. lineata*, whether from here (thousands have been examined) or from the Pacific Islands never causes confusion with this shell, the form, coloration and sculpture easily separating it. With these two was a third species of more elegant build and which differed at sight in the non-truncate columella, although the sculpture was of the same style. I had seen this form from Norfolk Island previously, and as it apparently occurs through the Indo-Pacific Region along with the true *Bullinula*, it is certainly deserving of generic rank and it is so here described.

*PERBULLINA ERRANS* *gen. & sp. nov.*

Plate xxxvii., fig. 6.

This beautiful shell is another of the curious tropical forms, as it is very closely related to a shell from the Island of Reunion, South Indian Ocean, which

Pilsbry described (Man. Conch., xv., 178, pl. 45, figs. 28-28, 1893) as *Bullina deshayesi*, a new name, as it had been figured by Deshayes (Moll. Reunion, p. 56, pl. 8, figs. 2-3, 1863) as *Bullina vitrea* Pease, but that species has the columella truncated and is a *Bullinula*.

Shell elongate oval, spire depressed, imperforate, thin.

Colour bluish white, encircled with two narrow distant black brown lines.

Apical whorls anastrophic, smooth, tilted, adult whorls sculptured, with flat-topped lirae and punctately grooved interstices; sutures rather deeply canaliculate.

Columella slightly twisted, but not truncate, nor does the twist develop into a fold as in the preceding genus; reflected and entirely covering the umbilical area so that only a chink is seen in young specimens.

Aperture basally effuse, towards the apex narrowing, outer lip thin.

Height: 17 mm.; breadth, 9.5 mm.

Habitat: Sydney Harbour, New South Wales.

When Gray introduced his *Bulla lineata* he also proposed *Bulla wallisii* (Ann. Philos. (Thomson), vol. xxv., p. 408, 1825), also from New Holland, but which has never been recognised. Pilsbry (Man. Conch., vol. xv., p. 373, 1893) reproduced the description under *Haminea* without comment; but a few pages (363) earlier he had described *H. crocata* Pease from the Sandwich Islands, observing, "Angas reports this from Lake Macquarie, New South Wales." Comparison of the two descriptions show that undoubtedly Gray's species was the same as Angas's, and therefore *wallisii* Gray should replace *crocata* Pease in our List. The true *crocata* Pease may be a very different species.

Pilsbry (Proc. Acad. Nat. Sci. Philad., 1920, p. 367, March 4, 1921) has introduced *Liloa* with type *Haminoea tomaculum* Pilsbry, and noted that *H. papyrus* A. Ad., *H. brevis* Q. & G., *H. cairnsiana* Mel. & St., and *H. cuticulifera* belong to *Liloa*, which may be nearer *Atys* than *Haminoea* s. str.

*Bulla wallisii* Gray (*crocata* Angas) does not generically agree with the *brevis* series, and I therefore introduce the new generic name *Penthominea*, naming the Sydney species as type.

#### PARAPLYSIA PIPERATA Smith.

In confirmation of the preceding records probably many slugs could be cited, but here notice will only be made of two. I picked up (living) on the little beach inside Sydney Harbour, known as Manly Cove, an "Aplysioid" slug of strange facies, which was determined as referable to the above species, the genus *Paraplysia* having been introduced by Pilsbry (Man. Conch., xv., p. 64, November 26, 1895) for the species *piperata* Smith and *mouhoti* Gilchrist. Smith had described *Aplysia piperata* (Zool. Coll. Alert., p. 89, 1884) from Thursday Island, Torres Straits, and it had been redescribed and figured by Gilchrist (Ann. Mag. Nat. Hist., Ser. 6, vol. xv., p. 403, pl. 18, figs. 2-4, 1895), and is here named as type of *Paraplysia*. The genus will be easily recognised again by the position of the rhinophores between the anterior ends of pleuropodial lobes, the latter being completely free; this indicates it is a swimming form and some of these slugs do not swim under great provocation, while others keep on swimming all the time.

#### NOTARCHUS PETAURISTA sp. nov.

Plate xxxvii., fig. 1.

An extraordinary little slug was dredged by Mr. Melbourne Ward on the Sow and Pigs Reef in about 4 fathoms of water, and it amused everybody by turning somersaults when disturbed in the aquarium. It seemed very different to anything hitherto seen, but upon reference to Pilsbry (Man. Conch., xvi., pp. 136-7, pl. 17, figs. 12-13, 1895) excellent figures were found, reproduced from Quoy and Gaimard (Voy de l'Astrol. Zool., vol. iii., 312, pl. 24, figs. 3-4, 1835) from Mauri-

tius. Pilsbry recorded that "The figures given by Quoy and Gaimard represent the living animal; but are so different from the others as to excite suspicion that a distinct species may be represented. Quoy and Gaimard called it *Aplysia gelatinosa* after Rang, and Pilsbry regarded Rang's names as equivalent to *Notarchus cuvieri* Blainville, 1824, and *Notarchus indicus* Schweigger, 1820, the monotype of *Notarchus* Cuvier. This adds a genus to the Australian fauna as the species already classed under *Notarchus*, viz., *Aclesia glauca* Cheeseman, may resume the named used by Cheeseman, as it is obviously a different generic type, or better still, *Ramosaclesia*, nov., for the New Zealand species.

## EXPLANATION OF PLATES.

## Plate xxxvii.

- Fig. 1. *Notarchus petaurista* Iredale.  
 2, 3. *Proxichione materna* Iredale.  
 4, 5. *Vepricardium pulchricostatum* Iredale.  
 6. *Perbullina errans* Iredale.  
 7. *Bullinula melior* Iredale.  
 8. *Bullinula lineata* Gray.  
 9. *Talopia morti* Iredale.  
 10. *Talopia dividua* Iredale.

## Plate xxxviii.

- Fig. 1. *Quibulla selina* Iredale.  
 2. *Distorsio reticulata* Bolten.  
 3. *Sydaphera renovata* Iredale.  
 4. *Quibulla botanica* Hedley.  
 5. *Mammilla propesimiae* Iredale.  
 6. *Chrysame lemma* Iredale.  
 7. *Perirhoe melamans* Iredale.  
 8. *Quibulla angasi* Pilsbry.  
 9. *Coralliophila nodosa* A. Adams.  
 10. *Clivipollia imperita* Iredale.  
 11. *Cymatium zimara* Iredale.  
 12. *Baryspira dyspetes* Iredale.  
 13. *Niotha comtessei* Iredale.  
 14. *Scala parspeciosa* Iredale.  
 15. *Colus sinovellus* Iredale.  
 16. *Colsyrnola sericea* Iredale.  
 17. *Vicimitra prosphora* Iredale.  
 18. *Mitropifex quasillus* Iredale.  
 19. *Colus consetti* Iredale.